The Hong Kong-Zhuhai-Macao Bridge (HZMB), spanning the Pearl River Estuary in Mainland China, is the world’s longest bridge-cum-tunnel sea crossing. Designed by the Information Services Department, Hong Kong Special Administrative Region Government—Macao Bridge connects the west banks of the Pearl River, and enhances Hong Kong’s position as a trading and logistics hub.

**Shorter Travel Times**

With the HZMB, the Western Pearl River Delta falls within a three-hour commuting radius of Hong Kong. Travel times are considerably shorter compared to sea routes in the past. For example, the travel time from Hong Kong Kwai Tsing Container Terminal to Zhuhai International Airport is 45 minutes compared to 3.5 hours.

**Economic Benefits**

The project helps foster economic integration of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), which boosts regional competitiveness and complementary functions of the cities.

**Expands Hong Kong’s economic hinterland and presents new growth engines by forging closer economic and social ties with western PRD**

**Connects the three places and provides more opportunities**

**An Iconic and Unique Bridge**

Innovative designs and unorthodox construction methods as well as delivery and installation techniques designed to overcome project challenges:

- **Artificial Islands** 33 giant immersed tube tunnel segments, each weighing about 550 tonnes—equal to 28 football fields.
- **Bridge-girder height** 130 giant steel cylinders, each 22m in diameter (as large as 60 Eiffel Towers) and up to 51m high—equal to 18-storey building.
- **Design speed limit** 100 km/h
- **Service life** 120 years

**Mega Scale**

- **Bridge length** 55km
- **Main Bridge** 35km, tunnel 7km
- **Artificial Islands** 23km
- **Crossing in the world**

- **Sub-sea Tunnel** 6.7km
- **Bridge and tunnel connected by 112km Link Road, 7km Sub-sea Tunnel and 33artificial islands**

- **Design**
  - Bridge and tunnel connected by a total area of 200,000m²—equal to 98 football fields.
  - Artiﬁcial islands, each weighing 80,000 tonnes—equal to 28 football fields, 60 Eiffel Towers, or 38m wide and 11m high, as high as 18-storey building.

**Hong Kong-Zhuhai-Macao Bridge**

Hong Kong

Macao

Zhuhai City of Guangzhou Province

Macao Special Administrative Region

Hong Kong Special Administrative Region

Zhuhai

12km

Zhuhai Link Road

Hong Kong

12km

Link Road

Macao

The project consists of 3 Main Bridge sections—Artificial Islands section, Main Bridge section, and Sub-sea Tunnel section.

**Main Bridge includes**

- **Sub-sea Tunnel**
  - Length: 7km
  - Diameter: 8m
  - Service life: 120 years
  - Designed to carry 240,000-tonne container vessels.

- **Artificial Islands**
  - Height: 33m
  - Length: 23km
  - Comprise 33 artificial islands, each weighing 80,000 tonnes—equal to 28 football fields.

- **Bridge and Tunnel**
  - Main Bridge length: 100km
  - Tunnel length: 23km
  - Service life: 120 years

**Economic and Social Benefits**

- **Kwai Tsing Container Terminal**
  - Established as a new land transport link between both sides of the Pearl River and enhances Hong Kong’s position as a trading and logistics hub.

- **Hong Kong-Zhuhai-Macao Greater Bay Area (GBA)**
  - Enhances Hong Kong’s competitiveness and complementary economic and social functions.

- **Airports**
  - Hong Kong International Airport
  - Zhuhai International Airport

- **Connects the three places and provides more opportunities**

- **Gulf of the Pearl River**
  - The navigation channel over the bridge is 330m wide (6 times wider than the Golden Gate Bridge).

**Complementary function of the cities**

- **Cunard Wharf**
  - Hong Kong
  - Western Pearl River Delta (PRD) region
  - Connects Hong Kong with more travelling options.

- **Chongming**
  - Eastern Pearl River Delta
  - Port to Zhuhai and Macao

- **Link Roads**
  - Eastern Link
  - Western Link

**Environmental Benefits**

- **Conservation**
  - Artificial islands
  - Coastal flora and fauna
  - 185,000 tree plantings

- **Marine Environment**
  - 15,000m² of coral reef
  - 100 km of marine monitoring

- **Saves time and costs**
  - 4 hours compared to 3.5 hours

**Travel Time**

- **Hong Kong**
  - 45 minutes

- **Zhuhai**
  - 75 minutes

- **Macao**
  - 90 minutes

**Artificial Islands**

- **Sub-sea Tunnel**
  - Length: 7km
  - Diameter: 8m
  - Service life: 120 years

**Bridge and Tunnel**

- **Main Bridge**
  - Length: 35km
  - Tunnel: 7km
  - Service life: 120 years

**Saves time and costs**

- **Transport links between both sides of the Pearl River and Hong Kong**
  - Establishes a new transport link
  - Expands Hong Kong’s economic hinterland
  - Helps foster economic integration of the GBA
  - Enhances competitiveness and complementary economic and social functions.

**Sea Crossings**

- **Golden Gate Bridge**
  - Length: 2.7km
  - Tunnel: 1.7km

**Economic Benefits**

- **Gulf of the Pearl River**
  - The navigation channel over the bridge is 330m wide (6 times wider than the Golden Gate Bridge).

- **Artificial Islands**
  - Height: 33m
  - Length: 23km
  - Comprise 33 artificial islands, each weighing 80,000 tonnes—equal to 28 football fields.

- **Bridge and Tunnel**
  - Main Bridge length: 100km
  - Tunnel length: 23km
  - Service life: 120 years

**Environmental Benefits**

- **Conservation**
  - Artificial islands
  - Coastal flora and fauna
  - 185,000 tree plantings

- **Marine Environment**
  - 15,000m² of coral reef
  - 100 km of marine monitoring

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**Travel Time**

- **Hong Kong**
  - 45 minutes

- **Zhuhai**
  - 75 minutes

- **Macao**
  - 90 minutes

**Artificial Islands**

- **Sub-sea Tunnel**
  - Length: 7km
  - Diameter: 8m
  - Service life: 120 years

**Bridge and Tunnel**

- **Main Bridge**
  - Length: 35km
  - Tunnel: 7km
  - Service life: 120 years
An artificial island off the northeast of Hong Kong International Airport

A transport hub

Houses clearance facilities for travellers and goods

The HZMB Hong Kong Section

While the HZMB Main Bridge is built by the three regional governments through a joint venture, the boundary crossing facilities and link roads in each place are built separately by each jurisdiction.

Comprises a 1km tunnel, 1.6km at-grade road and 9.4km sea and land viaduct

Span lengths up to 180m

The longest prestressed precast concrete bridge span for dual three-lane carriageway in HK to minimise environmental impact

Links

the Main Bridge and the HKP

Four different construction methods used (drill and blast, mining, cut and cover, box jacking) for a 1km tunnel to cater for different ground conditions and topographical constraints

Area over 90,000m²

Largest and iconic building of the HKP

Roof design in the form of a wave to evoke the undulating flow of surrounding waters

Provides immigration, customs and health clearance for cross boundary passengers

The Arrival Hall is on the Ground Floor; the Departure Hall is on the First Floor.

Passenger Clearance Building (PCB)